

The following article is the fifth in a series on California rarities edited by Morlan and Roberson. It is based on materials submitted to the California Bird Records Committee (CBRC). The description and circumstances were drawn from the accounts of the observer and have been reviewed by him. Roberson prepared the distributional summary; Morlan prepared the identification summary. In this way we hope much important information accumulated in CBRC files will become widely available.



White-winged Crossbills

Sketch by Tim Manolis

FIRST RECORD OF THE WHITE-WINGED CROSSBILL IN CALIFORNIA

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In the afternoon of 1 September 1978, Phil Gordon and his son Geoffrey were fishing near their camp at Mosquito Lake in the Salmon-Trinity Alps Wilderness Area, Trinity County, California. This area is at an elevation of 6600 feet (2010 m), about 7 miles west of the Scott Mountain summit on county highway 3. The 20-acre lake is in a small glacial cirque basin below a crest that divides Siskiyou and Trinity counties. It is surrounded by scattered Ponderosa *Pinus ponderosa* and Western White *P. monticola* pines, Red Fir *Abies magnifica*, Incense Cedar *Libocedrus decurrens*, and Mountain Hemlock *Tsuga mertensiana*. A canary-like twittering drew the Gordons' attention to a flock of finches perched quietly, seemingly feeding in the top of a fir. The birds then flew one by one to another fir 70 to 80 feet away. The Gordons watched the flock of 12 birds several times that afternoon. The birds moved restlessly from branch to branch, sometimes at distances of several hundred yards, but once they came as close as 75 to 80 feet. Although the birds stayed mostly in the tops of the firs, they descended to within 15 feet of the ground on one occasion. Viewing conditions were poor and backlit at first, but later the birds allowed a fairly close study for 4 or 5 minutes.

The birds seemed to be crossbills, but the tight twitter or trill of three or four phrases at different pitches was unlike the calls of Red Crossbills *Loxia cur-*

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virostra that Gordon knew from the Sierra Nevada. With better views, two white wingbars became conspicuous, and Pine Siskins *Carduelis pinus* and Pine Grosbeaks *Pinicola enucleator* became considerations. However, the three red birds in the flock ruled out siskins, and the small size and slender long bill eliminated the Pine Grosbeak. Gordon identified them as White-winged Crossbills *Loxia leucoptera*.

When Gordon and his son returned home from the camping trip three days later, they wrote descriptions on the CBRC's report form. Gordon wrote short, succinct notes, which he has expanded into sentences as follows:

These were small finches the size of a sparrow or of a House Finch *Carpodacus mexicanus* but seemed chunkier than a House Finch. The tail was short with a deep notch. Three birds were reddish on the head, neck, throat, breast and sides; the other nine were overall greenish gray. The lower belly and sides of the birds, especially the greenish ones, were streaked with dark. The darkish wings of both forms showed two bright white wingbars, which were unmistakable on all of the birds.

The lighting and position (perched on upper surface of branches) made observation of the "crossed bill" difficult. One male had a thin, down-curved upper mandible projecting beyond the lower mandible, but I did not see it cross. Otherwise the bill was small and conical. The exact bill color was not noted but seemed to be medium dark.

Geoffrey Gordon's notes were briefer:

Males were bright red with black wings. Females were greenish with no outstanding characters. Each had a white wingbar with a smaller wingbar above that was almost reduced to a white dot.

Both observers drew rough sketches showing the location of wingbars and basic bill shape (rather long and thin); Geoffrey's sketch emphasized the reduced extent of the upper wingbar.

This record of the White-winged Crossbill was unanimously accepted as a first for California by the CBRC after three circulations (Luther et al. 1983). In early circulation, a dissenter raised the possibility of Pine Grosbeaks, noting that this species has a disproportionately small bill with a downcurved culmen and behaves much in the way these birds were described (feeding slowly at the tips of branches, then moving one by one to the next tree). Furthermore, the "bright red" or "reddish" color seemed to be less pink than some members expected, and the birds were seen mostly at substantial distances. In the end, though, even the dissenter voted to accept, persuaded by the birds' small size (about that of House Finch, but chunkier), the reduced upper wingbar, and especially by the streaking on the lower belly. Some members noted that the twittering calls were appropriate for the White-winged Crossbill and pointed out that the species had occurred in numbers in British Columbia and Washington (outside of its usual haunts) in the summer and fall of 1978 (but little into Oregon; see more under "Distributional Summary"). One noted that Godfrey (1966) described the color of males as "bright scarlet or vermilion in summer, dull and pinkish in winter." Also persuasive was Gordon's prior experience with the Pine Grosbeak, which has never occurred in northwestern California. The Pine Grosbeak in California is a sedentary resident in the Sierra Nevada. Richard A. Erickson visited Mosquito Lake ten days later but was unsuccessful in finding any crossbills.

DISTRIBUTIONAL SUMMARY

The White-winged Crossbill is a Holarctic species of boreal forests, particularly spruce, fir, or larch (A.O.U. 1983). In North America it ranges from western Alaska to Labrador and south in the Cascades to Washington, in the Rockies to Wyoming (and irregularly to northern Utah, central Colorado, and northern New Mexico), and in the East to Maine (A.O.U. 1983; Figure 1). It often winters within its breeding range but is irruptive following cone crop failures (Bock and Lepthien 1976). During such invasions it has occurred as far south as Nevada, New Mexico, Texas, and Florida (DeSante and Pyle 1986), where it feeds on cones of other trees and the fruit of the Sweetgum *Liquidambar styraciflua* (George 1968). In October 1971, two rode a trans-Atlantic passenger ship from Newfoundland to Ireland (Abramson 1974). Irruptions in the Northwest can be impressive. Jewett et al. (1953) wrote of a "remarkable incursion" during the winter of 1908-09 throughout the Puget Sound area of Washington. Prior to 1940, however, the species was known in Oregon only from two specimens collected 12 July 1938 on the upper

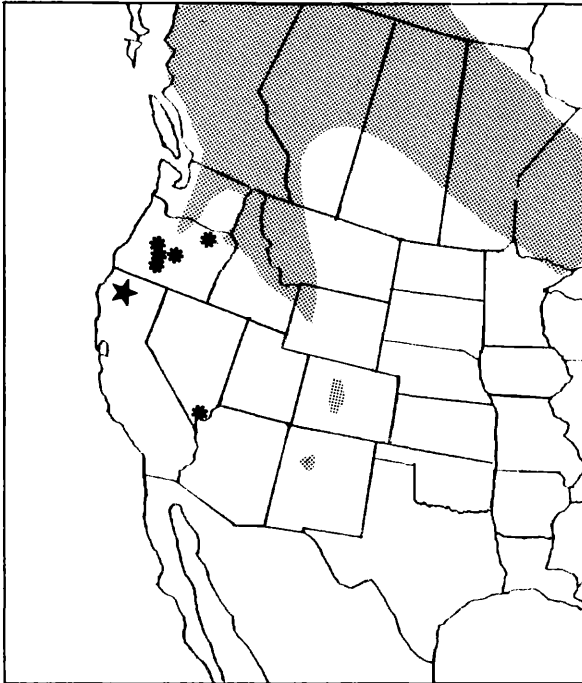


Figure 1. Approximate breeding range of the White-winged Crossbill in western North America (shaded), with extralimital records mentioned in the text (asterisks), and location of this record (star).

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Lostine River, Wallowa County, and a 19th-century sight record in Washington County (Gabrielson and Jewett 1940).

More recent irruptions in the Casades north of California occurred in 1974, 1978, 1981, and 1985. These typically began during late July, and flocks often spread south or toward the coast during the fall, usually tapering off by mid-October. The 1974 movement was largely limited to the mountains of southern British Columbia and Washington (Crowell and Nehls 1975), with a lone Oregon occurrence at La Grande in the northeast (Rogers 1975). In 1978, the year of the California sighting, the species "appeared abruptly and in large numbers" throughout the Washington Cascades and Olympic Mountains in August (Harrington-Tweit et al. 1978) and continued as a "great surge" through the Casades to Mt. Hood, Oregon, with one as far south as Bend, Deschutes County, in central Oregon, on 24 November (Rogers 1979). In 1981, an irruption sent birds south during early September to Gold and Waldo lakes, Lane County, in the Oregonian central Cascades (Hunn and Mattocks 1982). In the summer of 1984, an irruption in the Great Basin resulted in a record for Las Vegas, Nevada, the second for that state (Kingery 1984). However, the most impressive movements occurred in 1985, when an August-September incursion brought flocks of up to 60 birds south in the central Cascades to high elevations in Lane, Douglas, Deschutes, and northwestern Klamath counties (Summers 1986, Hunn and Mattocks 1986). These sites are only about 100 miles north of the California border. Each recent irruption has seemingly sent flocks farther south than previously (though this might be a function of increased observer coverage). The species should again be looked for in northern California, especially at higher elevations during the late summer and fall of the next irruption.

SUBSPECIES

In contrast to the Red Crossbill, which exhibits an enormous amount of geographic variation and may consist of several cryptic species (Groth 1988), the White-winged Crossbill exhibits very little variation. Only three subspecies have been described (Howell et al. 1968). *L. l. leucoptera*, breeding in North America, is smaller and smaller-billed than *L. l. bifasciata* of Eurasia (Witherby et al. 1943). North American birds have been reported from Europe and recently from extreme eastern Siberia (Tomkovich and Sorokin 1983), but Eurasian birds have not been reported in North America. A third, larger-billed subspecies, *L. l. megaplaga* (Riley 1916), is confined to the island of Hispaniola, where nesting was confirmed in 1971 (Kepler et al. 1975). On geographic grounds, the California birds may be presumed to have been *L. l. leucoptera*, although the described small bill also suggests this race.

IDENTIFICATION SUMMARY

Although the Pine Grosbeak is substantially larger than any crossbill, size may be difficult to judge without direct comparison. Furthermore, the California population of the Pine Grosbeak, *P. e. californica*, which is resident in the Red Fir belt of the Sierra Nevada, averages smaller and its bill is shallower and narrower than in all other races (Adkisson 1977). Pine Grosbeaks never show

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streaking on the underparts, characteristic of female and immature White-winged Crossbills. Even adult male White-winged Crossbills usually show blurry but fairly distinct streaking on their flanks.

White-winged Crossbills can be identified by their distinct flight calls (Adkisson 1980). Russell (1976) described two distinct flight notes: "a nasal, querulous *cheit-cheit-cheit* (not at all sweet), and a very dry, rapid *chut-chut-chut*," like a fast redpoll chatter, very different from the well-spaced flight calls of the Red Crossbill, whose vocalizations vary depending on the populations involved (Groth 1988, pers. comm.). The chatter call of the White-winged is common in flying birds and diagnostic.

Russell (1976) also pointed out that the shapes of the two crossbills are different, with the heavier bill and larger head of the Red Crossbill imparting a "front-heavy" appearance. The White-winged Crossbill is more slender and has a longer tail, producing a shape similar to that of the Purple Finch *Carpodacus purpureus*. This difference may not be as obvious, however, in the small-billed subspecies of the Red Crossbill.

Occasionally, Red Crossbills may show conspicuous white wing bars. This variation seems to be most frequent in immatures and especially in males. The Red Crossbill can be identical in color to the White-winged Crossbill, and both can show prominent whitish tertial edgings (van den Berg and Blankert 1980). In Europe, Berthold and Schlenker (1982) found prominent pale wing bars on one or two Red Crossbills of every thousand examined. Phillips (1977) suggested that this condition may be more frequent in European Red Crossbills. In American Red Crossbill specimens, Phillips found broad wing bars only on juvenal feathers, and also found them particularly rare among the smaller subspecies of the Red Crossbill, which are the ones most likely to be confused with the White-winged Crossbill. Such Red Crossbills have narrower (less than 2.5 mm), less defined wing bars (Pyle et al. 1987, Svensson 1984). The stronger definition of the wing bars on the White-winged Crossbill arises, in part, from the much blacker ground color of its wing coverts. The White-winged Crossbill also has blacker scapulars, tail, and uppertail coverts than does the Red Crossbill, and adult males usually show a more obvious black band across the lower back.

Occasionally, crossed bills may be seen on other species as a deformity. Tallman and Zusi (1984) described an apparent hybrid between a Red Crossbill and a Pine Siskin that had some field characters of the White-winged Crossbill, including streaked underparts and wing bars. The latter were quite faint and narrower than in the siskin, the mandibles were not crossed, and the uppertail coverts were olive, not blackish as in the White-winged Crossbill.

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Laysan Albatross and chick, Guadalupe Island

Photo by Eric Lichtwardt